

Temperature data logger of EBI 12 series

General technical specifications for EBI 12 T series

Operating temperature: logger	-90 °C ... +150 °C (-130 °F ... 302 °F)*
Operating temperature: radio operation	-30 °C ... +150 °C (-22 °F ... 302 °F)
Temperature accuracy	±1.5 °C (-200 °C ... -85 °C)* ±0.5 °C (-85 °C ... -40 °C)* ±0.2 °C (-40 °C ... 0 °C)* ±0.1 °C (0 °C ... +120 °C)* ±0.05 °C (+120 °C ... +140 °C)* ± 0.1 °C (+140 °C ... +150 °C)* ± 0.5 °C (+150 °C ... +250 °C)* ± 0.8 °C (+250 °C ... +400 °C)*
Time accuracy	< 5 sec (24 h)
Temperature resolution	0.01 °C
Sensor	Pt 1000, Class A
Interval	250 ms ... 24 hours.*
Measurement mode	<ul style="list-style-type: none"> • Endless measurement • Start / stop measurement • Measure upon start temperature • Start immediately until end of memory
Storage temperature	0 °C ... +125 °C
Maximum operating pressure	Temperature logger 10 bar (abs)
Minimum operating pressure	Logger with flexible cable probe 20 mbar (abs)
Battery	Lithium cell, 3.6 V, user replaceable
Dimensions (Ø x H)	48 mm x 24 mm**
Weight	Approximately 110 g **
Housing material	316 L Stainless steel / PEEK
Protection class	IP 68
Certificate	Factory calibration certificate

* Deviating specifications can be found in the product descriptions.

** Dimensions and weight may be different depending on the type.

Product lines



Red line

Blue line

Short Description	<ul style="list-style-type: none"> • Temperature data logger with external probe less than 2 mm diameter • Data logger with additional units • Special process logger 	<ul style="list-style-type: none"> • All other temperature data logger
Radio mode	Loggers can transfer data during the measurement process	Not possible
Total memory capacity	100,000 values	27,000 values

EBI 12-T100 Temperature Data Logger with internal temperature sensor



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Application sample

- For process monitoring during convenience food production
- For routine control in bedpan washers
- For temperature mappings
- To measure in raw material storage



Technical Data

Measurement range (Use in EX Area)	EBI 12-T100: -90 °C ... +150 °C (-130 °F ... +302 °F) EBI 12-T100-EX: -40 °C ... +85 °C (-40 °F ... +185 °F)
Data memory	100,000 measurement values
Factory calibration certificate	-20 °C, 0 °C, +60 °C and +134 °C
Radio mode	Not possible

- 1 internal temperature sensor
- Particularly robust

Type	Description	Part No.
EBI 12-T100	Internal temperature sensor	1340-6600
EBI 12-T100-EX	Internal temperature sensor	1340-6600-EX

EBI 12-T101 Temperature Data Logger with internal temperature sensor



Application sample

- For use in dry ice and in cryogenic
- In bedpan washers and washing machines



Technical Data

Measurement range	-90 °C ... +105 °C (-130 °F ... +221 °F)
Accuracy	± 0.5 °C (-90 °C ... -40 °C) ± 0.3 °C (-40 °C ... +105 °C)
Sampling rate	1 s ... 24 h
Data memory	27,000 measurement values
Factory calibration certificate	-20 °C, 0 °C and +60 °C

- 1 internal temperature sensor
- Particularly robust

Type	Description	Part No.
EBI 12-T101	Internal temperature sensor	1340-6601

EBI 12-T21X Temperature Data Logger

rigid metal probe



Application sample

- For process monitoring during convenience food production

Technical Data

Measurement range	-40 °C ... +150 °C (-40 °F ... +302 °F)
Accuracy	± 0.1 °C (0 °C ... +150 °C) ± 0.3 °C (-40 °C ... 0 °C)
Sampling rate	1 s ... 24 h
Data memory	27,000 measurement values
Factory calibration certificate	-20 °C, 0 °C, +60 °C and +134 °C



- 1 external temperature probe, Ø 3 mm
- Radial pointed

Type	Description	Part No.
EBI 12-T210	Needle length = 50 mm	1340-6602
EBI 12-T211	Needle length = 75 mm	1340-6603

EBI 12-T23X Deep Temperature Data Logger

rigid metal probe



Application sample

- Ideal for use in canning for pasteurization control

Technical Data

Measurement range	-40 °C ... +150 °C (-40 °F ... +302 °F)
Accuracy	± 0.1 °C (0 °C ... +150 °C) ± 0.3 °C (-40 °C ... 0 °C)
Sampling rate	1 s ... 24 h
Data memory	27,000 measurement values
Factory calibration certificate	-20 °C, 0 °C, +60 °C and +134 °C



- Axial pointed, M5 Thread
- 1 external temperature probe, Ø 3 mm
- Various needle length available

Type	Description	Part No.
EBI 12-T230	Needle length = 50 mm	1340-6606
EBI 12-T231	Needle length = 75 mm	1340-6607
EBI 12-T232	Needle length = 100 mm	1340-6608
EBI 12-T233	Needle length = 150 mm	1340-6609

EBI 12-T285 Temperature Data Logger *bendable, blunt metal probe*



Application sample

- For retort maintenance and process monitoring

Technical Data

Measurement range	-40 °C ... +200 °C (-40 °F ... +392 °F)
Accuracy	± 0.2 °C (0 °C ... +150 °C) ± 0.3 °C (-40 °C... 0 °C) ± 0.5 °C > 150 °C
Sampling rate	1 s ... 24 h
Data memory	100,000 measurement values
Factory calibration certificate	-20 °C, 0 °C, +60 °C and +134 °C

Approximately available from Q2 2019

- 1 external temperature probes, Ø 3 mm
- Axial, blunt

Type	Description	Part No.
EBI 12-T285	Needle length = 2,000 mm	1340-6685

EBI 12-T43X Temperature Data Logger *rigid metal probes*



Application sample

- Ideal for use in canning for pasteurization control

Technical Data

Measurement range	-40 °C ... +150 °C (-40 °F ... +302 °F)
Accuracy	± 0.1 °C (0 °C ... +150 °C) ± 0.3 °C (-40 °C... 0 °C)
Sampling rate	1 s ... 24 h
Data memory	2 x 13,500 measurement values
Factory calibration certificate	-20 °C, 0 °C, +60 °C and +134 °C

- Axial pointed, M5 Thread
- 2 external temperature probes, Ø 3 mm
- Various needle length available

Type	Description	Part No.
EBI 12-T430	Needle length = 50 mm	1340-6614
EBI 12-T431	Needle length = 75 mm	1340-6615
EBI 12-T432	Needle length = 100 mm	1340-6616
EBI 12-T433	Needle length = 150 mm	1340-6617

EBI 12-T46X Bottle Logger rigid metal probe



Application sample

- Ideal for use in bottles

Technical Data

Measurement range	-40 °C ... +150 °C (-40 °F ... +302 °F)
Accuracy	± 0.3 °C (-40 °C ... +150 °C)
Sampling rate	1 s ... 24 h
Data memory	2 x 13,500 measurement values
Factory calibration certificate	-20 °C, 0 °C, +60 °C and +121 °C

- Axial, blunt, M10 thread
- 1 external temperature probe, Ø 6 mm
- 1 external temperature probe, Ø 3 mm
- Various needle lengths available

Type	Description	Part No.
EBI 12-T461	Needle length = 135 mm	1340-6623
EBI 12-T462	Needle length = 190 mm	1340-6624
EBI 12-T463	Needle length = 245 mm	1340-6625
EBI 12-T464	Needle length = 270 mm	1340-6626
EBI 12-T465	Needle length = 300 mm	1340-6627

EBI 12-T22X Temperature Data Logger bendable metal probe



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Application sample

- Measurement in drain of sterilizers
- In oven (protected by Thermal-Isolation-Box)
- EtO sterilization (ATEX type)

Technical Data

Measurement range (Use in EX Area)	EBI 12-T220: -200 °C ... +200 °C (-328 °F ... +392 °F)
	EBI 12-T220-EX: -40 °C ... +85 °C (-40 °F ... +185 °F)
	EBI 12-T221: -200 °C ... +400 °C (-328 °F ... +752 °F)
Data memory	100,000 measurement values
Factory calibration certificate	-20 °C, 0 °C, +60 °C, +134 °C and +250 °C if the probe length is 500 mm



- 1 external temperature probe, Ø 1.5 mm
- Radial arranged

Type	Description	Part No.
EBI 12-T220	Needle length = 250 mm	1340-6604
EBI 12-T220-EX	Needle Length = 250 mm	1340-6604-EX
EBI 12-T221	Needle length = 500 mm	1340-6605

EBI 12-T24X Temperature Data Logger *bendable metal probe*



Application sample

- In washer disinfectors
- H₂O₂ sterilization

Technical Data

Measurement range	-200 °C ... +200 °C (-328 °F ... +392 °F)
Data memory	100,000 measurement values
Factory calibration certificate	-20 °C, 0 °C, +60 °C and +134 °C

- 1 external temperature probe, Ø 1,5 mm
- Axial arranged

Type	Description	Part No.
EBI 12-T240	Needle Length = 250 mm	1340-6611
EBI 12-T241	Needle Length = 500 mm	1340-6612

EBI 12-T421 Temperature Data Logger *bendable metal probes*



Application sample

- In oven (protected by Thermal-Isolation-Box)
- In washer disinfectors

Technical Data

Measurement range	-200 °C ... +400 °C (-328 °F ... +752 °F)
Data memory	2 x 50,000 measurement values
Factory calibration certificate	-20 °C, 0 °C, +60 °C, +134 °C and +250 °C

- 2 external temperature probes, Ø 1.5 mm
- Radial arranged

Type	Description	Part No.
EBI 12-T421	Needle Length = 500 mm	1340-6630

EBI 12-T441 Temperature Data Logger

bendable metal probes



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Application sample

- In washer disinfectors
- H₂O₂ sterilization
- EtO sterilization (ATEX type)

Technical Data

Measurement range (Use in EX Area)	EBI 12-T441: -200 °C ... +200 °C (-328 °F ... +392 °F) EBI 12-T441-EX: -40 °C ... +85 °C (-40 °F ... +185 °F)
Data memory	2 x 50,000 measurement values
Factory calibration certificate	-20 °C, 0 °C, +60 °C and +134 °C

- 2 external temperature probes, Ø 1.5 mm
- Axial arranged

Type	Description	Part No.
EBI 12-T441	Needle Length = 500 mm	1340-6629
EBI 12-T441-EX	Needle Length = 500 mm	1340-6629-EX

EBI 12-T490 Temperature Data Logger

flexible cable probes



Application sample

- Steam sterilizer



Technical Data

Measurement range	-20 °C ... +150 °C (-4 °F ... +302 °F)
Data memory	2 x 50,000 measurement values
Factory calibration certificate	-20 °C, 0 °C, +60 °C and +134 °C

- 2 external temperature probes, Ø 1.2 mm
- Radial arranged

Type	Description	Part No.
EBI 12-T490	Cable Length = 600 mm	1340-6634

EBI 12-T690 Temperature Data Logger flexible cable probes



Application sample

- Steam sterilizer



Technical Data

Measurement range	-20 °C ... +150 °C (-4 °F ... +302 °F)
Data memory	4 x 25,000 measurement values
Factory calibration certificate	-20 °C, 0 °C, +60 °C and +134 °C

- 4 external temperature probes, Ø 1.2 mm
- Radial arranged

Type	Description	Part No.
EBI 12-T690	Cable Length = 600 mm	1340-6635

EBI 12-T47X Temperature Data Logger flexible cable probes



Application sample

- Steam sterilizer



Technical Data

Measurement range	-20 °C ... +150 °C (-4 °F ... +302 °F)
Data memory	2 x 50,000 measurement values
Factory calibration certificate	-20 °C, 0 °C, +60 °C and +134 °C

- 2 external temperature probes, Ø 1.2 mm
- Axial arranged

Type	Description	Part No.
EBI 12-T470	Cable Length = 600 mm	1340-6640
EBI 12-T471	Cable Length = 1,200 mm	1340-6644

EBI 12-T671 Temperature Data Logger flexible cable probes



Application sample

- Steam sterilizer

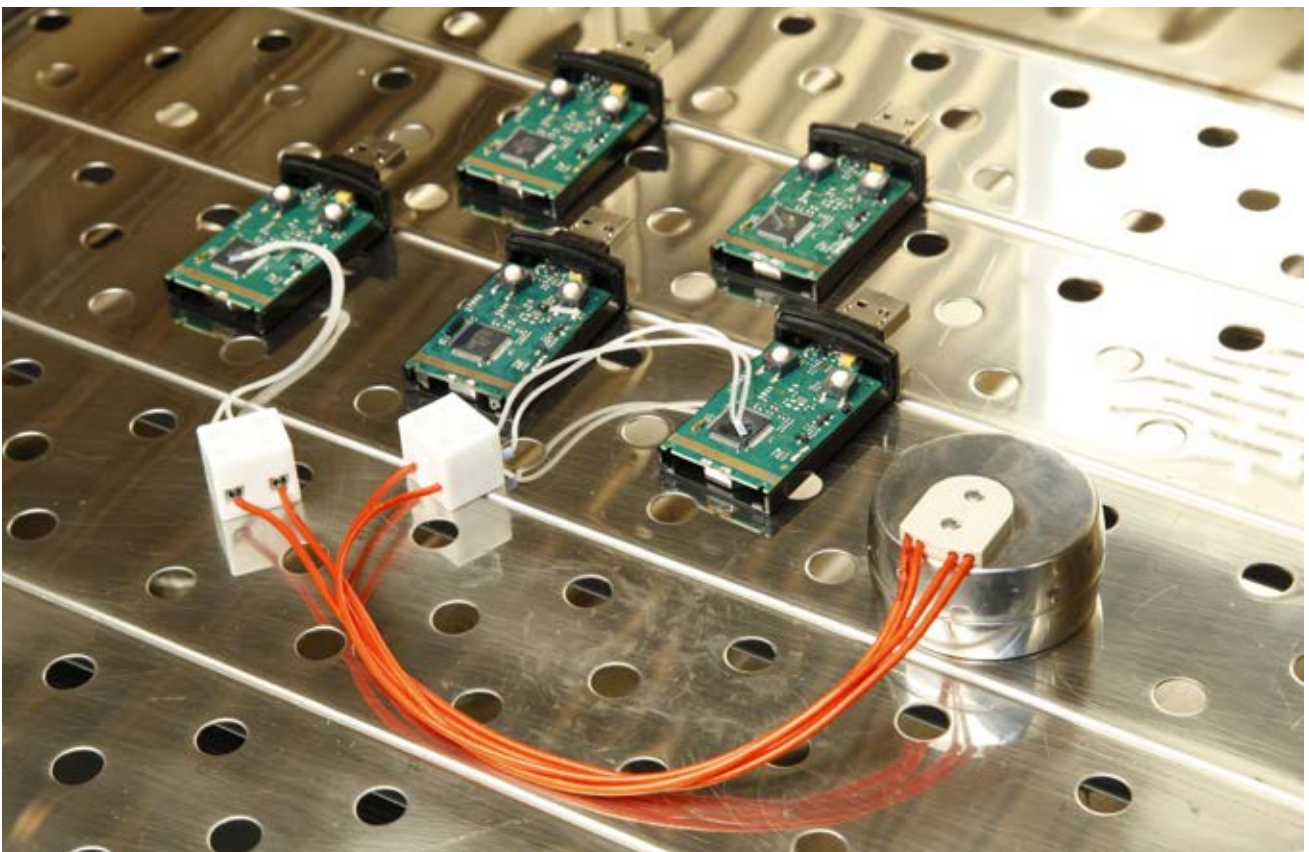


Technical Data

Measurement range	-20 °C ... +150 °C (-4 °F ... +302 °F)
Data memory	4 x 25,000 measurement values
Factory calibration certificate	-20 °C, 0 °C, +60 °C and +134 °C

- 4 external temperature probes, Ø 1.2 mm
- Axial arranged

Type	Description	Part No.
EBI 12-T671	Cable Length = 1,200 mm	1340-6645



Fast measurement accurately placed during production or storage